A Study on The Validity and Reliability of Basic Needs Questionnaire

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ABSTRACT

The aim of this study is to measure the validity and reliability standard of Basic Needs questionnaire designed by William Glasser. This study also attempts to determine if the Basic Needs questionnaire has the high validity and reliability criteria suitable to be applied in Malaysia. Five expert panels from the counseling discipline and 119 students from two different schools were chosen for group sampling. The instrument used in this study was the questionnaire with 85 items among 5 subscale category. The data was analyzed using cronbach alpha and test-retest analysis. The result showed that half of the items in this instrument were of significantly higher quality. In the first phase, the needs coefficient scores .885. and the second phase the coefficient scored is .899. In general, the result proves that this instrument possesses a high validity and reliability standard for application in Malaysia. Several implications and suggestions are also proposed.

INTRODUCTION

Malaysia is a rapidly developing country in terms of economic, social, cultural, educational, scientific and technological developments. These rapid developments have brought beneficial as well as adverse consequence on our society. While we have to acknowledge the material wealth that these developments have brought, they also have undesirable impact on our social stability. Malaysian students are also affected by these developments especially in terms of the decline of their morality standard. One of the most significant sources for this troubling trend is due to the negligence in fulfilling their individual needs causing them to suffer from identity crisis phenomenon.

According to Choice Theory, all human behaviors are driven by the attempt to satisfy his or her basic needs (Glasser, 1984; 1998; 2001). The knowledge of which needs are not being met in an individual's life is important in understanding his or her behaviour. That knowledge can therefore be used to determine the kind of intervention needed to create a needs-satisfying environment. Glasser (1984; 1998; 2001) describes five basic needs that must be met for physiological and psychological health. The physiological needs for survival is represented by biological desires, need for food, water, shelter and reproduction, as well as the need for safety and security. Humans also attempt to satisfy the four psychological needs for power, freedom, fun and belonging.

The Power need relates to the desire for status, dominance, respect, and achievement. They are the needs that are the most difficult to satisfy. Belonging refers to the need to be with others, to feel cared for, and to be in cooperative relationships. Freedom, a need which often conflicts with Power and to some extent Belonging, is the desire to do what one wants to do and to be able to make choices. Finally, the need for Fun is the desire to play, laugh, and to seek enjoyment. It is hypothesized to be linked to the ability to learn (Glasser, 2001).

Social problems, that include the rising crime rate, are a constant worry in our society. Statistics released by Bukit Aman Police Headquarters (2009) showed a worrying crime trend especially among the young people and children. As an indicator the statistic below shows the number of crime-related incidence involving young people and children- teenagers 16-18 years old (6435 responses), teenagers 13-15 years old (2227 responses), children 7-12 years old (147 responses). In terms of distribution of crimes committed among the races is Malay (72.7% - 6401 people), Indian (10% - 876 people), and Chinese (7.3% - 641 people). All these social problems occur because there is no single tool that is suitable to be used in Malaysia to determine an individual's basic needs.

The objective of this research is to determine the validity of the basic needs in secondary schools and to determine the reliability standard among secondary school students.

METHODOLOGY

PARTICIPANTS

The participants of the study were five expert panels from the counseling discipline and 119 Form Four (sixteen years old) students from two schools in Perak.

PROCEDURE

PHASE I:
A questionnaire of basic needs from William Glasser was constructed according to the process flow measurement instruments by Brown 1983:34 in Sidek 2005.

PHASE II:
The questionnaire was examined by five expert panels from the counseling discipline. They were Associate Professor Dr. Abdul Malek bin Abdul Rahman (UPSI), Dr. Nasir Bistamam (UPSI), Mr. Roslee Ahmad (UTM), Dr. Robert Wubbolding (The William Glasser Institute) and Associate Professor Dr. Zuria Mahmud (UKM). The selection panels were chosen due to their knowledge in Choice Theory Reality Therapy (CTRT) as well as their academic authority in the more general field of counseling.

PHASE III:
Reliability is the consistency of assessment data and can be most straightforwardly estimated by giving the same test twice and correlating the resulting scores (Murphy & Davidshofer, 2001). However, estimates of internal consistency establish an upper limit on reliability. Therefore, internal consistency was estimated by computing a coefficient alpha for the 85 items and for the 17 items within each area subscale among the 119 student participants. Test-retest reliability analysis was also examined by administering the questionnaire a second time to the same group of students. A two-week interval occurred between the initial assessment and the later assessment.

RESULTS

VALIDITY

The table 1 shows the improvement in overall comments given by the expert evaluators. Overall, the experts gave positive comments and helped in improving the questionnaire.

Table 1 : Expert Evaluators

Expert	Improving
Expert 1	All items fit unless I tick *. These items are extreme, or double-bind (not positive or negative). There may be out-liers in the data later. These are just suggestions. May be appropriate if the sample consisted of student discipline problems.
Expert 2	There are some items that I mentioned to the amendments to suit the sub-constructs, and in accordance with the age of the respondents. On the whole item can be used. However, please express that to the item rating 7 and below.
Expert 3	On the whole sub-item constructs are accepted. Just there are some terms that can be repaired. Great efforts to produce quality instruments to measure CTRT in Malaysia.
Expert 4	In general, the items can be used to measure the constructs and sub-constructs in Choice Theory.
Expert 5	I suggest not to make any changes for the questionnaire.

RELIABILITY

A coefficient alpha was computed for the 85 items of the scale and resulted in a score of .885. An alpha was also computed for the seventeen items within each subscale, which was found to have coefficients of .688 for survival, .526 for belonging, .828 for power, .552 for freedom, and .731 for fun.

A test-retest reliability estimate was computed by correlating the first score with the second set of scores obtained two weeks later with a Pearson Product Moment. The resulting coefficients were .899 for the total score, .617 for survival, .482 for belonging, .806 for power, .572 for freedom and .825 for fun.

There were 38 items deleted because the items were bigger than standardized item alpha and the items were not significant. A test-retest reliability estimate was computed again by the second score with the third set of scores obtained three weeks later with a Pearson Product Moment. The resulting coefficients were .871 for the total score, .780 for survival, .653 for belonging, .845 for power, .762 for freedom, and .793 for fun.

DISCUSSION

The study finds that all expert panels agree that the needs questionnaire fulfills the theoretical aspects as suggested in the Choice Theory. The validity method corresponds with studies conducted by other researchers such as Roberson (1999), Sidek & Marzuki (2007) and Ahmad Jazimin (2006). Also, suggestions and recommendations proposed by the expert panels have been acknowledged and acted upon in order to further improve the design of the questionnaire.

The study also shows that the reliability coefficient manages to attain a good score. In the first phase, the needs coefficient scores .885. In the second phase the coefficient scored is .899. Although there are some differences in the reliability coefficient for survival, love and belonging, power, freedom and fun in the second phase, the differences are not so significant as to impact on the overall result. This is in line with Kerlinger (1979), Syaharom (1990), Majid (1998) and Othman (2001) who suggest that a coefficient of .60 and above are acceptable as a tool of measurement. This shows that the needs questionnaire possesses a high validity and reliability standard in measuring students' needs.

Based on the results obtained further recommendation is also suggested. What is important is more work needs to be done to improve on weak items identified in the basic needs questionnaire. This is in order for the questionnaire to reach the acceptable level of validity and reliability before it can be used in the Malaysian context. One suggestion is to use other methods such as using split-method strategy to test the reliability of measuring instruments of Basic Needs. This method is not only convenient but also cheaper, faster and more practical (Sidek, 2005).

In addition, practitioners of psychology and counseling are recommended to review significant measuring devices used by other practitioners overseas so as to evaluate their suitability for use in Malaysia. Practitioners of psychology and counseling are also recommended to develop their own tool for the same purpose.

Finally, practitioners of psychology and school counselors in particular can use the basic tool for students' needs in order to improve communication thereby reducing problems that occur inside or outside of school. Also, future research should focus on the validity of this instrument using a larger sample so that the validity and reliability of this instrument can be improved and used within Malaysian context.

CONCLUSION

Overall, this study evaluates the validity and reliability of the basic needs questionnaire. The findings showed that this measure has good reliability values when tested using the Cronbach Alpha. The findings also indicate that the test device is suitable for use in the context of Malaysia as this measure has good reliability quality.

REFERENCES

Ahmad Jazimin et al. (2009). *Membina Kesahan Muka dan Kandungan Modul Kaunseling Kelompok Choice Theory Reality Therapy*. Dibentangkan dalam Persidangan Kebangsaan Kaunseling pada 3-5 Nov 2009 di Palaca of Golden Horses, KL.

Ahmad Jazimin Jusoh et al. (2006). *Analisis Kesahan dan Kebolehpercayaan soal selidik profil kaunselor Terapi Realiti.* Kertas kerja UPSI's Regional Seminar & Exhibition on Educational Research 2006. anjura Pusat Pengurusan Penyelidikan, Universiti Pendidikan Sultan Idris, 27-30 Julai.

American Counseling Association, 1998; dalam Sabariah Siron (2003). *Teori Kaunseling Dalam Perhubungan Menolong*. Petaling Jaya: Pearson Prentice Hall.

Amir Hassan Dawi (2006). *Penteorian Sosiologi dan Pendidikan*. Edisi Ketiga. Tanjong Malim: Quantum Books.

Bailey K.D. (1978). *Methods of Social Research*. New York: Fee Press.

Blance, B. (2004). *I Taught Them but Did They Learn…?*. International Journal of Reality Therapy. Vol. XXIV, num 1.19.

Burns. M.K. et al. (2006). *Students Needs Survey: A Psychometrically Sound Measure of the five basic needs*. International Journal of Reality Therapy. Vol. XXV, num 2.

Coats, K. (1991). The Impact of Reality Therapy in a School for Emotionally Disturbed Youth: A Preliminary Report. Diperoleh

Cohen, L. Dan Lawrence, M (1985). *Research Methods in Education*. Second Edition. London: Croom Helm.

Corsini, 1994 dalam Sitti Saleha Samsuddin (2006). *Penilaian Alat Ukuran Job Descriptive Index (JDI) Berdasarkan Analisis Kebolehpercayaan, Kesahan dan Analisis Item*. Latihan Ilmiah Yang Tidak Diterbitkan. Bangi: Universiti Kebangsaan Malaysia.

Drummond, R. J. dan Jones, K. D. (2006). *Assessment Procedures for Counselors and Helping Professionals*. New Jersey: Pearson Wducation, Inc.

Glasser, W. (1985). *Control Theory*. New York: HarperCollins,

Glasser, W. (1998) Choice Theory: A new psychology of personal freedom. New York: HarperCollins.

Gregory, R. J (1992) dalam Sitti Saleha Samsuddin (2006). *Penilaian Alat Ukuran Job Description Index (JDI) Berdasarkan Analisis Kebolehpercayaan, Kesahan dan Analisis Item*. Latihan Ilmiah Yang Tidak Diterbitkan. Bangi: Universiti Kebangsaan Malaysia.

Jamaludin Ahmad (2002). Kesahan, Kebolehpercayaan dan Keberkesanan Modul Program Maju Diri ke atas Motivasi Pencapaian di Kalangan Pelajar-Pelajar Sekolah Menengah Negeri Selangor. Tesis Doktor Falsafah yang tidak diterbitkan. Serdang: Universiti Putra Malaysia.

Julie Cotton (1995). The Theory of Assessment: An Introduction. London: Kogen Page Limited.

Kim, J. (2006). *The Effect of A Bullying Prevention Program on Responsibility and Victimization of Bullied Children in Korea*. International Journal of Reality Therapy. Vol. XXVI, num 1.

LaFond, B. A. G. (2000*). Glasser's Reality Therapy approach to relationships: Validation of a Choice Theory Basic Needs Scale (Doctoral Dissertation, St. Mary's University, 2000).* Dissertation Abstracts International: Section B: The Sciences & Engineering, 60, 3615.

Lay Wah et al. (2008). *Pembinaan dan Pengesahan Ujian Membaca Perkataan dan Ujian Mengeja untuk Tujuan Mengenal Pasti Disleksia: satu kajian rintis*. Jurnal Pendidikan dan Pendidikan, Jil. 23, 151-162.

Margolis. H. (2001). *Reality Therapy and Underachievement: A case study*. Developmental Disabilities Center, Temple University Philadelphia, Pennsylvania 19122.

Mohd Majid Konting (1990). *Kaedah Penyelidikan Pendidikan*. Edisi pertama. Kuala Lumpur : Dewan Bahasa dan Pustaka.

Mohd Majid Konting (1998). *Kaedah Penyelidikan Pendidikan*. Edisi keempat. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Mohd Majid Konting (2004). *Kaedah Penyelidikan Pendidikan*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Murphy, K. R & Davidshover, C.O. (1998). *Psychological Testing. Principle and Application*. 4th ed. Englewood Cliffs, New Jersey: Prentice Hall.

Othman Mohamed (2000). *Prinsip Psikoterapi dan Pengurusan dalam Kaunseling*. Serdang: Universiti Putra Malaysia.

Othman Mohamed (2001). *Penulisan Tesis Dalam Bidang Sains Sosial Terapan*. Serdang: Universiti Putra Malaysia.

Pei Cheng & Pei Eng (2009). *Penentuan Kesahan dan Kebolehpercayaan Alat Ukur Metakognitif Dengan Analisis Model Rasch*. Pulau Pinang: Universiti Teknologi MARA.

Roberson (1999). *Helping Gifted/Talented Students Improve Their Balancing Acts*. Diperolehi Ogos 24 (2009) daripada http://www.ebscohost.com.

Sapora Sipon (2008). *Teori Kaunseling dan Psikoterapi*. Negeri Sembilan Darul Khusus: Universiti Sains Islam Malaysia.

Sidek Mohd Noah (2005). *Pengujian dan Penilaian Kaunseling-Teori dan Aplikasi*. Serdang: Ampang Press Sdn. Bhd.

Sidek Mohd Noah (2005). *Rekabentuk Penyelidikan: Falsafah, Teori dan Praktis*. Serdang: Universiti Putra Malaysia.

Sidek Mohd Noah dan Wan Marzuki Wan Jaafar (2007). *Analisis Kesahan dan Kebolehpercayaan Inventori Penilaian Kaunselor terhadap Penyelia (IPKtP)*. Jurnal PERKAMA, 13:1-13.

Sidek Mohd Noah (2007). *Kesahan dan Kebolehpercayaan Alat Ukuran Vocational Preference Inventory oleh John L. Holland*. Jurnal PERKAMA, 13:59-73.

Sunday Star (2010, Januari 3). Students caught abusing drugs., 16.

Syaharom Abdullah (1990). *Panduan Amali Untuk Penyelidikan Pendidikan*. Kuala Lumpur: Dewan Bahasa dan Pustaka. Edisi Terjemahan.

Tuckman, 1978 dalam Sidek Mohd Noah (2005). *Rekabentuk Penyelidikan Falsafah, Teori dan Praktis*. Serdang: Universiti Putra Malaysia.

Utusan Malaysia (2010, Januari 2). Remaja mati diserang sekumpulan lelaki., 14.

Whiston, S. C. (2005). *Principles and Applications of Assessment in Counseling*. United States of America: Thomson Brooks/Cole.

Zolkifli (2006). Kebolehpercayaan dan Kesahan Ujian Lari/Berjalan Sebatu dan Ujian. Diperolehi pada September 30, 2009 daripada http://www.freewebs.com/outdoorasia/zol%20ghani%20master's%20thesis.pdf